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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,078	09/23/2003	Jack Steenstra	030231	6292

23696 7590 11/29/2005

QUALCOMM, INC
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EXAMINER	
WEST, LEWIS G	

ART UNIT	PAPER NUMBER
2682	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/670,078	STEENSTRA ET AL.	
	Examiner	Art Unit	
	Lewis G. West	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 September 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24 and 30-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24 and 30-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

Applicant's arguments with respect to claims 1-24 and 30-33 have been considered but are moot in view of the new ground(s) of rejection.

Whether the information communicated to the phone is further communicated to another device is moot, as the limitations of the claims are met, and this limitation is not claimed, positively or negatively.

Other arguments simply explain how applicant has narrowed the scope of the claim, and these new limitations are addressed herein.

Applicant's amendment has changed the scope of the claims, and new claims are added, necessitating new search. Therefore this action is made final.

Claim Objections

Claim 30 is objected to because of the following informalities: Spelling. In line 1 of the claim "fom" is assumed to be "from". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Shin (US 6,006,109).

Regarding claim 30, Shin discloses an apparatus for use in a first device to receive digital data from a second device, the apparatus comprising: a jack (220) configured to receive analog signals encoded with the digital data; and a conversion unit (MODEM 100) coupled to the jack and configured to recover the digital data from the analog signals; wherein the conversion unit recovers the digital data based on either an analog to digital conversion.

Regarding claim 31, Shin discloses the apparatus of claim 30, wherein the analog signals have frequencies in the range of approximately 1 kHz to 3kHz. Modems, such as MODEM 100 of Shin, operate using DTMF, the high tones of DTMF range from 1.209-1.477 kHz, fully within the range claimed by applicant.

Regarding claim 32, Shin discloses an apparatus for use in a first device to transmit digital data to a second device, the apparatus comprising: a conversion unit (MODEM 100) configured to encode the digital data into analog signals; a jack (210) coupled to the conversion unit and configured to transmit the analog signals encoded with digital data; wherein the conversion unit encodes the digital data based on either a digital to analog conversion.

Regarding claim 33, Shin discloses the apparatus of claim 32, wherein the analog signals have frequencies in the range of approximately 1 kHz to 3kHz. Modems, such as MODEM 100 of Shin, operate using DTMF, the high tones of DTMF range from 1.209-1.477 kHz, fully within the range claimed by applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin (US 6,006,109) in view of Lee (US 5,873,045)

Regarding claim 1, Shin discloses apparatus for use in a first device to receive digital data from a second device, the apparatus comprising: a jack configured to receive analog signals encoded with the digital data; and a conversion unit coupled to the jack and configured to recover the digital data from the analog signals wherein the second device is one of a mobile phone, a personal digital assistant or a smart phone. (Col. 3 lines 31-55), but discloses that the first device is a computer. Lee discloses two devices communicating modulated information wherein one device is a PDA and the other is a phone. (Col. 4 lines 9-41) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to connect a PDA with a phone in order to exchange data and to share functionality of both devices (Lee col. 3 lines 18-29), and further a PDA is simply a personal computer with reduced components and housing, and therefore equivalent to the computer specified in Shin.

Regarding claim 2, Shin discloses the apparatus of claim 1, further comprising: a non-wireless communication device configured to couple with the jack, the non-wireless communication device configured to carry the analog signals encoded with digital data to the first device using the jack. (Col. 3 lines 31-55)

Regarding claim 3, Shin discloses the apparatus of claim 2, wherein the non-wireless communication device comprises: a non-wireless medium having a first end and a second end; a first plug coupled to said first end and configured to couple to the jack; and a second plug coupled to said second end and configured to couple to a jack of the second device. (Col. 3 lines 31-55)

Regarding claim 4, Shin discloses the apparatus of claim 1, wherein the jack is configured to couple to either one of a headphone or a headset. (Col. 5 lines 13-25)

Regarding claim 5, Shin discloses the apparatus of claim 4, wherein the jack is configured to receive perceptible sound. (Col. 3 lines 31-55)

Regarding claim 6, Shin discloses a method for use in a first device to receive digital data from a second device, the method comprising: receiving analog signals encoded with the digital data using a jack; and recovering the digital data from the analog signals wherein the second device is one of a mobile phone, a personal digital assistant or a smart phone.. (Col. 3 lines 31-55) Lee discloses two devices communicating modulated information wherein one device is a PDA and the other is a phone. (Col. 4 lines 9-41) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to connect a PDA with a phone in order to exchange data and to share functionality of both devices (Lee col. 3 lines 18-29), and further a PDA is simply a personal computer with reduced components and housing, and therefore equivalent to the computer specified in Shin.

Regarding claim 7, Shin discloses the method of claim 6, further comprising: coupling a non-wireless communication device to the jack; and receiving the analog signals through the non-wireless communication device. (Col. 3 lines 31-55)

Regarding claim 8, Shin discloses the method of claim 7, wherein receiving the analog signals comprises: receiving the analog signals as audible analog signals. (Col. 3 lines 31-55)

Regarding claim 9, Shin discloses the method of claim 7, wherein receiving the analog signals comprises: receiving the analog signals electronically. (Col. 3 lines 31-55)

Regarding claim 10, Shin discloses the method of claim 6, further comprising: receiving perceptible sound using the jack. (Col. 3 lines 31-55)

Regarding claim 11, Shin discloses apparatus for use in a first device to transmit digital data to a second device, the apparatus comprising: a conversion unit configured to encode the digital data into analog signals; and a jack coupled to the conversion unit and configured to transmit the analog signals encoded with digital data wherein the second device is one of a mobile phone, a personal digital assistant or a smart phone. (Col. 3 lines 31-55) , but discloses that the first device is a computer. Lee discloses two devices communicating modulated information wherein one device is a PDA and the other is a phone. (Col. 4 lines 9-41) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to connect a PDA with a phone in order to exchange data and to share functionality of both devices (Lee col. 3 lines 18-29), and further a PDA is simply a personal computer with reduced components and housing, and therefore equivalent to the computer specified in Shin.

Regarding claim 12 Shin discloses, the apparatus of claim 11, further comprising: a non-wireless communication device configured to couple with the jack, the non-wireless communication device configured to carry the analog signals encoded with digital data from the first device using the jack. (Col. 3 lines 31-55)

Regarding claim 13, Shin discloses the apparatus of claim 12, wherein the non-wireless communication device comprises: a non-wireless medium having a first end and a second end; a first plug coupled to said first end and configured to couple to the jack; and a second plug coupled to said second end and configured to couple to a jack of the second device. (Col. 3 lines 31-55)

Regarding claim 14, Shin discloses the apparatus of claim 11, wherein the jack is configured to couple to either one of a headphone or a headset. (Col. 5 lines 13-25)

Regarding claim 15, Shin discloses the apparatus of claim 14, wherein the jack is configured to output perceptible sound. (Col. 3 lines 31-55)

Regarding claim 16, Shin discloses method for use in a first device to transmit digital data to a second device comprising: encoding the digital data into analog signals; and transmitting the analog signals encoded with digital data using a jack wherein the second device is one of a mobile phone, a personal digital assistant or a smart phone (Col. 3 lines 31-55), but discloses that the first device is a computer. Lee discloses two devices communicating modulated information wherein one device is a PDA and the other is a phone. (Col. 4 lines 9-41) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to connect a PDA with a phone in order to exchange data and to share functionality of

both devices (Lee col. 3 lines 18-29), and further a PDA is simply a personal computer with reduced components and housing, and therefore equivalent to the computer specified in Shin.

Regarding claim 17, Shin discloses the method of claim 16, further comprising: coupling a non-wireless communication device to the jack; and transmitting the analog signals through the non-wireless communication device. (Col. 3 lines 31-55)

Regarding claim 18, Shin discloses the method of claim 17, wherein transmitting the analog signals comprises: transmitting the analog signals as audible analog signals. (Col. 3 lines 31-55)

Regarding claim 19, Shin discloses the method of claim 17, wherein transmitting the analog signals comprises: transmitting the analog signals electronically. (Col. 3 lines 31-55)

Regarding claim 20, Shin discloses the method of claim 16, further comprising: outputting perceptible sound using the jack. (Col. 3 lines 31-55)

Regarding claim 21, Shin discloses apparatus for use in a first device to receive digital data from a second device, the apparatus comprising: means for receiving through a jack, analog signals encoded with the digital data; and means for recovering the digital data from the analog signals wherein the second device is one of a mobile phone, a personal digital assistant or a smart phone. (Col. 3 lines 31-55), but discloses that the first device is a computer. Lee discloses two devices communicating modulated information wherein one device is a PDA and the other is a phone. (Col. 4 lines 9-41) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to connect a PDA with a phone in order to exchange data and to share functionality of both devices (Lee col. 3 lines 18-29), and further a PDA is simply a personal

computer with reduced components and housing, and therefore equivalent to the computer specified in Shin.

Regarding claim 22, Shin discloses the apparatus of claim 21, further comprising: a non-wireless means for carrying the analog signals encoded with digital data to the first device using the jack. (Col. 3 lines 31-55)

Regarding claim 23, Shin discloses apparatus for use in a first device to transmit digital data to a second device, the apparatus comprising: means for encoding digital data into analog signals; and means for transmitting through a jack the analog signals encoded with digital data wherein the second device is one of a mobile phone, a personal digital assistant or a smart phone. (Col. 3 lines 31-55) wherein the first device is one of a mobile phone, a personal digital assistant or a smart phone and the second device is one of a mobile phone, a personal digital assistant or a smart phone.

Regarding claim 24, Shin discloses the apparatus of claim 23, further comprising: non-wireless means for carrying the analog signals encoded with digital data from the first device to the second device using the jack. (Col. 3 lines 31-55)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 571-272-7859. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lewis West
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Quochien B. Vuong 11/22/05

QUOCHIEN B. VUONG
PRIMARY EXAMINER